2-hydroxymethyl--1, 3-vinyl Dioxolane

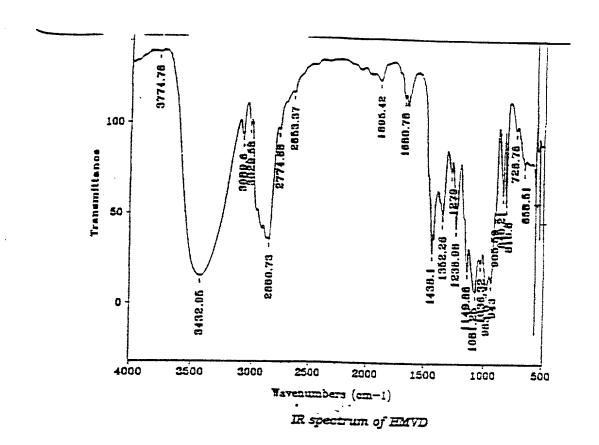
Dimethyl Cyclohexane-1, 3-dicarboxylate

FIGURE 1

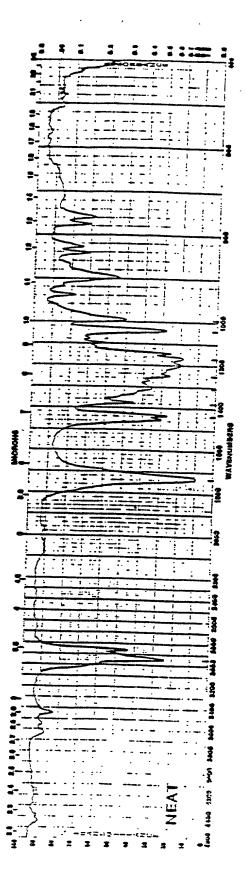
FIGUR = 2

FIGURE3

FIGURE 4

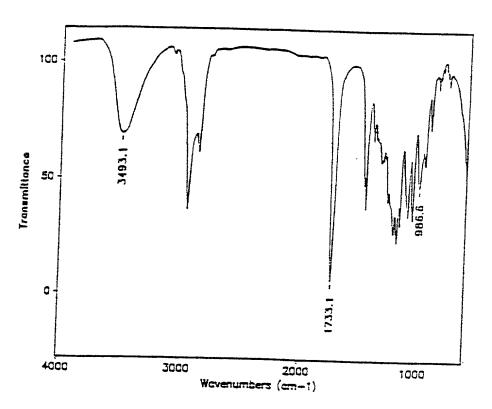


F1G.5



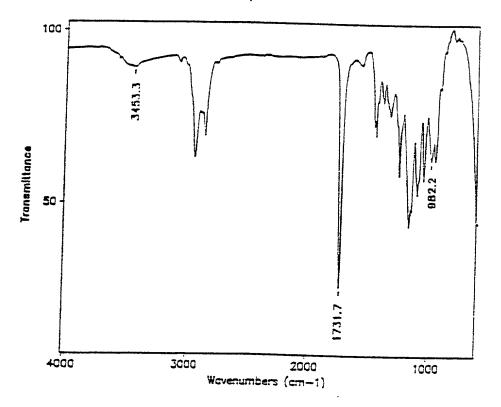
IR spectrum of dimethyl 1,4-cyclohexanedicarboxylate

FIG. 6



IR spectrum of the reaction dispersion prior to any prepolymer formation

FIG.7



IR spectrum of the reaction dispersion after appreciable amounts of PEVD prepolymer has formed

FIG.8

$$H_{2}C_{d} - C_{e} - H_{2}C_{f} - O - C_{g} - C_{n} - C_{g} - O - C_{r}H_{2} - C_{e} - C_{d}H_{2}$$

$$C_{b} = C_{a}H_{2}$$

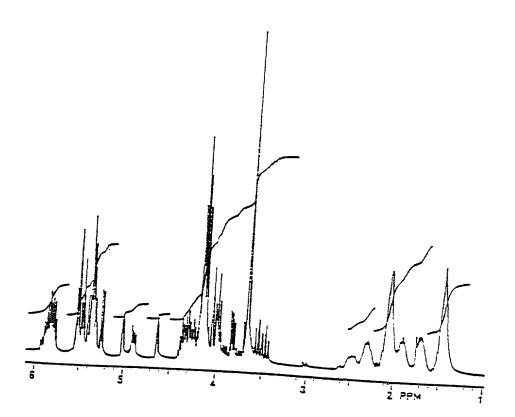
$$H_{2}C_{d} - C_{e} - C_{d}H_{2}$$

$$H_{3}C_{b} = C_{a}H_{2}$$

$$H_{4}C_{b} = C_{a}H_{2}$$

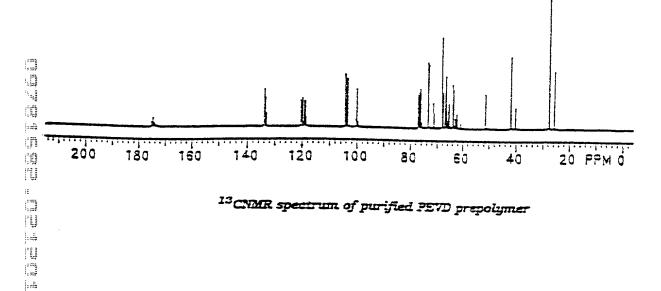
$$H_{5}C_{b} = C_{a}H_{2}$$

Chemical structure of PEVD prepolymer labeled for NMR analysis



<sup>1</sup> HNMR spectrum of purified PEVD prepolymer

FIG. 10



13 CNMR spectrum of purified PEVD prepolymer

FIG.11